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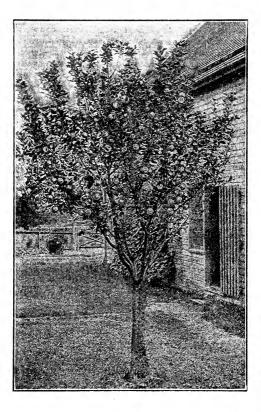
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# FRUIT TREES

AND

## HOW TO GROW THEM



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### HINTS ON TRANSPLANTING, ETC.

O attempt is made to give complete directions on all points connected with Tree Planting, but simply a few hints on the more important operations. Every man who purchases a bill of trees should put himself in possession of some treatise on tree culture that will furnish him with full and reliable instructions on the routine of management. Transplanting is to be considered under the following heads:

#### CARE OF STOCK ON ARRIVAL.

Upon arrival of box or package place it in a shed, barn or cellar away from sun, take off the cover and thoroughly wet down with water and allow it to stand twelve hours, or over night, before removing the stock (excepting Raspberry tips and Strawberry plants, which should be at once heeled in soil). Then make ready a trench fourteen inches deep, and as soon as stock is removed from the package heel it in this trench, giving the roots plenty of mellow soil, well pressed down with the feet. If soil is dry moisten it with water after heeling in; the trees are then ready for planting and should only be taken out as needed. If trees or plants are very dry or shriveled at once bury them, root, body and branch, in very moist soil, well pressed down, and leave them for four to six days, when they will be found as plump and fresh as when first dug. If frozen, no water should be applied, but they should at once be buried in earth until all frost is out, and they will not be injured.

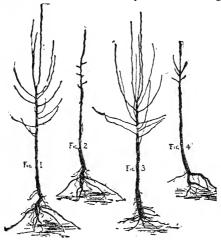
#### PREPARATION OF THE SOIL.

For fruit trees the soil should be *dry*, either natural or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. It should also be well prepared by twice

plowing, at least, beforehand, using the subsoil plow after the common one at the second plowing. On new fresh lands manuring will be unnecessary, but on lands exhausted by cropping, fertilizers must be applied, either by turning in heavy crops of clover or well decomposed manure or compost. To insure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn, or potatoes. If you want trees to grow well, be vigorous and strong, you must give them plenty of food and good cultivation until August 1st, when all cultivation should cease, to allow new wood to thoroughly ripen up before cold weather, which it will not do if kept growing by cultivation after that date.

#### PREPARATION OF THE TREES.

In regard to this important operation, there are more fatal errors committed than in any other. As a general thing, trees are planted in the ground precisely as they are sent from the nursery. In removing a tree,



Figs. 1 and 3 show trees as they come from the nursery. Figs. 2 and 4 show the same trees properly pruned back for planting.

no matter how carefully it may be done, a portion of the roots are broken and destroyed, and consequently the balance that existed in the structure of the tree is deranged. This must be restored by a proper pruning, adapted to the size, form, and condition of the tree, as follows:

Standard Orchard Trees.—These, as sent from the nursery, vary from five to seven feet in height, with naked stems or trunks, and a number of branches at the top forming a head. These branches should all be cut back to within three or four buds of their base. This lessens the demand upon the roots, and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood. In case of older trees, of extra size, the pruning must be in proportion; as a general thing it will be safe to shorten all the previous year's shoots to three or four buds at their base, and where the branches are very numerous some may be cut out entirely.

Dwarf Trees, if of two or three years' growth, with a number of side branches, will require to be pruned with a two-fold object in view, viz., the growth of the tree and the desired form. The branches must be cut into the form of a pyramid by shortening the lower ones, say one-half, those above them shorter, and the upper ones around the leading shoots to within two or three buds of their base. The leader itself must be shortened back one-half or more. When trees have been dried or injured much by exposure, the pruning must be

closer than if in good order.

#### PLANTING.

Be sure to remove label before tree begins to grow or it will be fatally injured through strangulation.

Illustration following presents vividly the difference between correct and incorrect planting. In Fig. 1 too small a hole has been dug, and the roots have been crowded into it in such a way that if the tree lives at all it will be at the cost of great effort and loss of vitality.

This is the method which is commonly practiced, and we cannot therefore too strongly warn our cus-

tomers against it.

The roots must have plenty of room, and great care should be exercised to have them as nearly as possible in the same position they occupied in the nursery.

In Fig. 2 the roots occupy this position, being carefully arranged, and the top has been properly trimmed regardless of the great injury to the present appearance of the tree. In transplanting under the most careful management, so many of the fibrous roots which carry nourishment are destroyed that it is very essential that the top be correspondingly removed.

> Top left without crowded together

Top properly pruned Top left without pruning and roots and cut back, and roots carefully spread out

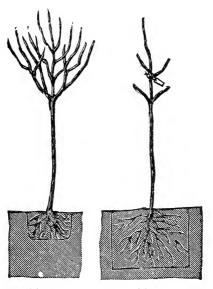


Fig. 1 Improperly planted

Fig. 2 Properly planted

Notice.—The above show the right and wrong way to plant trees. Plant and trim according to Fig. 2 and you will have no trouble in making your trees grow. This is the secret of success.

Dig holes in the first place large enough to admit the roots of the tree to spread out in their natural position; then, having the tree pruned as before directed, let one person hold it in an upright position, and the other shovel in the earth, carefully putting the finest and the best from the surface in among the roots, filling every interstice, and bringing every root in contact with the soil. When the earth is nearly filled in, a pail of water may be thrown on to settle and wash in the earth around the roots; then fill in the remainder and tread gently with the foot. The use of the water is seldom necessary, except in dry weather, early in fall or late in spring. Guard against planting too deep; the trees, after the ground settles, should stand in this respect as they did in the nursery. Trees on dwarf stock should stand so that all the stock be under the ground. and no more. In very dry, gravelly ground, the holes should be dug twice the usual size and depth, and filled in with good loamy soil, pressing soil well down with the feet. See that roots are well spread out and soil trmly around them-don't hurry the job, do it well, find success is certain. After planting, each tree ahould be well mulched for two or three feet out with soarse manure. This prevents drying and is better chan watering. The trees should not be long exposed to sun and air. Never put any manure in the holes with the roots, it causes decay.

#### STAKING.

If the trees are tall and much exposed to winds, a stake should be planted with the tree, to which it should be tied in such a manner as to avoid chafing. A piece of matting or cloth may be put between the tree and the stake.

#### MULCHING.

When the tree is planted throw around it as far as the roots extend, and a foot beyond, five or six inches deep of rough manure or litter. This is particularly necessary in dry ground, and is highly advantageous everywhere both in spring and fall planting. It prevents the ground from baking or cracking, and maintains an equal temperature about the roots.

#### AFTER-CULTURE.

The grass should not be allowed to grow around young trees after being planted, as it stunts their growth. The ground should be kept clean and loose around them until, at least, they are of bearing size.

You can't expect to get a paying crop without cultivation. Cultivate the orchard and keep it cultivated up to August 1st. The finest and most productive orchards we have ever seen are cultivated every ten days or two weeks during spring. The best fertilizer for a young orchard is a green crop plowed in every spring, or liberal manuring until trees are well grown and begin to fruit, after that wood ashes or potash, with an occasional green crop plowed in, are better than barnyard manure and will supply all that is needed.

Treatment of Trees that have been Frozen in the Packages or Received during Frosty Weather.—Place the packages, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus, they will not be injured by the freezing. Trees procured in the fall for spring planting, should be laid in trenches in a slanting position to avoid the winds; the situation should always be sheltered and the soil dry. A mulching on the roots and a few evergreen boughs over the tops will afford good protection.

#### APPLES FOR PROFIT.

Our Farmers are just beginning to realize the immense profit to be derived from a well kept orchard. There are thousands of acres of land on which just as much money can be made to an acre with fruit as is now made in Hood River, Oregon, and other fruit sections, where bearing orchards are being sold for from \$2000 to \$6000 per acre. One acre in fruit will produce as much profit as ten acres in grain and with far less labor.

It is a known fact that if Fruit Growers would organize (which they are doing now) and grade their

fruit the same as the Hood River Fruit Growers, the fruit would bring just as good prices, and in time, when the people begin to realize the difference in quality, will bring better prices, the more Eastern being superior in quality. This organizing of the Fruit Growers is a matter of but a short time.

#### WHERE TO PLANT.

Fruit will do well planted on most any kind of soil; rocky hills too steep for other crops will raise the finest kind of fruit. Take your field where you raise your best crops, plant it to an apple orchard and it will bring you many times your grain profits. A yield of \$2000 per acre net is a common occurrence to those who take good care of their orchards. The favorable conditions of a good orchard are not in any particular kind of soil or climate, but it is the man who takes good care of his young trees, by fertilizing and spraying, regardless of location that makes the orchard a gold

Young, Healthy Stock is much superior to old, or very large trees. Two or three year old trees are more apt to live, are easier handled and can be trimmed or shaped to any desired form, and will outstrip older stock in growth. Practical fruit growers always plant young trees.

#### VARIETIES.

Most people make the mistake of planting too many varieties. When the buyer comes around he will tell you you have not enough of any one variety to bother with. Confine your list to not more than five varieties —the varieties that do best in your locality.

### BARNES NURSERIES

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